Listing of Claims:

1. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:

   (a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;

   (b) each coordinate label is unique to the Node to which it is assigned;

   (c) a path between a first Node and a second, non-adjacent Node being determined from one of said coordinate labels ~~associated with~~ assigned to said first Node and one of said coordinate labels ~~associated with~~ assigned to said second Node;

   (d) said first Node is a gateway Node and said second Node is a destination Node; and

   (e) data from a foreign network is received at said gateway Node and routed on said network to said destination Node.

2. (Original) The network of claim 1 wherein said received data is routed to a closest Node of a plurality of mirror Nodes.

3. (Original) The network of claim 1 where said gateway Node translates said data from said foreign network into a local packet.

4. (Original) The network of claim 3 where said local packet is a DART packet.

5. (Original) The network of claim 3 where said local packet is an IP packet.

6. (Original) The network of claim 3 where said local packet is an Appletalk packet.

7. (Original) The network of claim 3 where said local packet is an Ethernet packet.

8. (Original) The network of claim 3 where said local packet is a MPLS packet.

9. (Original) The network of claim 3 where said local packet is an ATM packet.

10. (Original) The network of claim 1 where said data is a DART packet wrapped in a foreign packet, and where said gateway Node unwraps said DART packet from said foreign packet.

11. (Original) The network of claim 10 where said foreign packet is an IP packet.

12. (Original) The network of claim 10 where said foreign packet is an Appletalk packet.

13. (Original) The network of claim 10 where said foreign packet is an Ethernet packet.

14. (Original) The network of claim 10 where said foreign packet is a MPLS packet.

15. (Original) The network of claim 10 where said foreign packet is an ATM packet.

16. (Original) The network of claim I wherein said data received from said foreign network is an IP packet.

17. (Original) The network of claim I wherein said data received from said foreign network is a MPLS packet.

18. (Original) The network of claim I wherein said data received from said foreign network is an ATM packet.

19. (Original) The network of claim 1 wherein said data received from said foreign network is an Appletalk packet.

20. (Original) The network of claim 1 wherein said data received from said foreign network is an Ethernet packet.

21. (Currently amended) A network comprising a plurality of Nodes interconnected by Links, wherein:

(a) each Node is assigned a set of one or more coordinate labels, each representing a path comprising one or more Links or other Nodes;

(b) each coordinate label is unique to the Node to which it is assigned;

(c) a path between a first Node and a second, non-adjacent Node being determined from one of said coordinate labels ~~associated with~~ assigned to said first Node and one of said coordinate labels ~~associated with~~ assigned to said second Node;

(d) said second Node is a gateway Node; and

(e) data is transmitted from said gateway Node into a foreign network.

22. (Original) The network of claim 21 where said gateway Node translates said data into a foreign packet.

23. (Original) The network of claim 22 where said foreign packet is a DART packet.

24. (Original) The network of claim 22 where said foreign packet is an LP packet.

25. (Original) The network of claim 22 where said foreign packet is an Appletalk packet.

26. (Original) The network of claim 22 where said foreign packet is an Ethernet packet.

27. (Original) The network of claim 22 where said foreign packet is a MPLS packet.

28. (Original) The network of claim 22 where said foreign packet is an ATM packet.

29. (Original) The network of claim 21 where said gateway Node wraps a DART packet in a foreign packet to form said data.

30. (Original) The network of claim 29 where said foreign packet is an LP packet.

31. (Original) The network of claim 29 where said foreign packet is an Appletalk packet.

32. (Original) The network of claim 29 where said foreign packet is an Ethernet packet.

33. (Original) The network of claim 29 where said foreign packet is a MPLS packet.

34. (Original) The network of claim 29 where said foreign packet is an ATM packet.

35. (Original) The network of claim 21 where said transmission from said gateway Node into said foreign network is performed by a Link Label replacement.

36. (Original) A method for determining a path from a source Node to a destination Node in a network comprising a plurality of Nodes interconnected by Links, said Nodes including a first Node, and a plurality of second Nodes, said second Nodes including said source Node and destination Node, said method comprising the steps of:

(a) assigning to each of said second Nodes, including said source Node and said destination Node, one or more coordinate labels, each coordinate label assigned to a second Node representing a path through said network from said second Node to said first Node;

(b) determining a path from said source Node to said destination Node by combining one coordinate label of said source Node and one coordinate label of said destination Node;

(c) receiving at said source node data from a foreign network, and

(d) routing said data on said network to said destination node.

37. (Currently amended) The method of claim 36 further comprising the step ~~of~~ of:

(e) unwrapping a foreign packet from said data to recover a DART packet.

38. (Original) The method of claim 37 where said foreign packet is an 1P packet.

39. (Original) The method of claim 37 where said foreign packet is an Appletalk packet.

40. (Original) The method of claim 37 where said foreign packet is an Ethernet packet.

41. (Original) The method of claim 37 where said foreign packet is a MPLS packet.

42. (Original) The method of claim 37 where said foreign packet is an ATM packet.

43. (Currently amended) The method of claim 36 further comprising the step of:

(f) ~~Translating~~ translating said data received from said foreign network into a DART packet.

44. (Original) The method of claim 43 wherein said data received from said foreign network is an EP packet.

45. (Original) The method of Claim 43 wherein said data received from said foreign network is a MPLS packet.

46. (Original) The method of claim 43 wherein said data received from said foreign network is an ATM packet.

47. (Original) The method of claim 43 wherein said data received from said foreign network is an Appletalk packet.

48. (Original) The method of claim 43 wherein said data received from said foreign network is an Ethernet packet.

49. (Original) A method for determining a path from a source Node to a destination Node in a network comprising a plurality of Nodes interconnected by Links, said Nodes including a first Node, and a plurality of second Nodes, said second Nodes including said source Node and destination Node, said method comprising the steps of:

(a) assigning to each of said second Nodes, including said source Node and said destination Node, one or more coordinate labels, each coordinate label assigned to a second Node representing a path through said network from said second Node to said first Node;

(b) determining a path from said source Node to said destination Node by combining one coordinate label of said source Node and one coordinate label of said destination Node; and

(c) transmitting at said destination node data onto a foreign network.

50. (Original) The method of claim 49 where said transmission from said destination Node into said foreign network is performed by a Link Label replacement.

51. (Currently amended) The method of claim 49 further comprising the step ~~of~~ of:

~~(c)~~(d) wrapping a DART packet in a foreign packet to form said data.

52. (Original) The method of claim 51 where said foreign packet is an IP packet.

53. (Original) The method of claim 51 where said foreign packet is an Appletalk packet.

54. (Original) The method of claim 51 where said foreign packet is an Ethernet packet.

55. (Original) The method of claim 51 where said foreign packet is a MPLS packet.

56. (Original) The method of claim 51 where said foreign packet is an ATM packet.

57. (Currently amended) The method of claim 49 further comprising the step of:
~~(f)~~(e) forming said data by translating a DART packet into a foreign packet.

58. (Original) The method of claim 57 wherein said data received from said foreign network is an IP packet.

59. (Original) The method of Claim 57 wherein said data received from said foreign network is a MPLS packet.

60. (Original) The method of claim 57 wherein said data received from said foreign network is an ATM packet.

61. (Original) The method of claim 57 wherein said data received from said foreign network is an Appletalk packet.

62. (Original) The method of claim 57 wherein said data received from said foreign network is an Ethernet packet.

63. (Currently amended) A Node for use in a network, said network comprising a plurality of Nodes connected by Links, wherein:
said Node for use in said network has one or more coordinate labels assigned thereto, each coordinate label representing a complete path from said Node to a particular other, non-adjacent destination Node of said network, each of said coordinate labels being unique to said Node, wherein data from a foreign network is received at said Node and routed on said network to said destination Node.

64. (Currently amended) The node of claim 63 wherein said data received from said foreign network is a foreign packet, and said ~~gateway~~ Node unwraps said foreign packet to retrieve a DART packet.

65. (Original) The node of claim 64 where said foreign packet is an LP packet.

66. (Original) The node of claim 64 where said foreign packet is an Appletalk packet.

67. (Original) The node of claim 64 where said foreign packet is an Ethernet packet.

68. (Original) The node of claim 64 where said foreign packet is a MPLS packet.

69. (Original) The node of claim 64 where said foreign packet is an ATM packet.

70. (Original) The node of claim 63 where said data is translated from a foreign packet into a DART packet.

71. (Original) The node of claim 70 where said foreign packet is an LP packet.

72. (Original) The node of claim 70 where said foreign packet is an Appletalk packet.

73. (Original) The node of claim 70 where said foreign packet is an Ethernet packet.

74. (Original) The node of claim 70 where said foreign packet is a MPLS packet.

75. (Original) The node of claim 70 where said foreign packet is an ATM packet.

76. (Currently amended) A Node for use in a network, said network comprising a plurality of Nodes connected by Links, wherein:
said Node for use in said network has one or more coordinate labels assigned thereto, each coordinate label representing a complete path from said Node to a particular other, non-adjacent Node of said network, each of said coordinate labels being unique to said Node, wherein said node transmits ~~said~~ data onto ~~said~~ a foreign network.

77. (Currently amended) The node of claim 76 where said ~~gateway~~ Node wraps a DART packet in a foreign packet to form said data.

78. (Original) The node of claim 77 where said foreign packet is an IP packet.

79. (Original) The node of claim 77 where said foreign packet is an Appletalk packet.

80. (Original) The node of claim 77 where said foreign packet is an Ethernet packet.

81. (Original) The node of claim 77 where said foreign packet is a MPLS packet.

82. (Original) The node of claim 77 where said foreign packet is an ATM packet.

83. (Original) The Node of claim 76 where said data is a DART packet that has been translated into a foreign packet.

84. (Original) The Node of claim 83 wherein said foreign packet is an IP packet.

85. (Original) The Node of claim 83 wherein foreign packet is a MPLS packet.

86. (Original) The Node of claim 83 wherein foreign packet is an ATM packet.

87. (Original) The Node of claim 83 wherein said foreign packet is an Appletalk packet.

88. (Original) The Node of Claim 83 wherein said foreign packet is an Ethernet packet.

89. (Currently amended) The node of claim 76 where said transmission from said ~~gateway~~ Node into said foreign network is performed by a Link Label replacement.